

**AMENDED VERSION**

**IN THE CLAIMS:**

1. (Currently amended) An isolated and purified  $\alpha$ -N-acetyl-D-galactosaminidase from *Clostridium perfringens* having the sequences set forth in SEQ ID Nos ~~1-10~~ 1-11.

2. (Original) The isolated and purified  $\alpha$ -N-acetyl-D-galactosaminidase from *Clostridium perfringens* as set forth in claim 1 further characterized by being a homogenous preparation and having protease activity below detectable limits.

3. (Original) The isolated and purified  $\alpha$ -N-acetyl-D-galactosaminidase from *Clostridium perfringens* as set forth in claim 2 further characterized by

- a) having a molecular weight of approximately 72.1kDa by SDS-PAGE and approximately 57.5 kDa by molecular sieve chromatography;
- b) being homogenous by SDS-Page;
- c) having specific activity of approximately 40.54 U mg<sup>-1</sup> min<sup>-1</sup> using PNP-N-acetyl- $\alpha$ -D-galactosaminide as a substrate and BSA as a protein standard in a BioRad Protein assay; and
- d) having an approximate pH optimum of 6.5 to 7.0.

4. (Currently amended) The isolated and purified  $\alpha$ -N-acetyl-D-galactosaminidase from *Clostridium perfringens* according to claim 1, wherein said  $\alpha$ -N-acetyl-D-galactosaminidase has a sequence selected from the group consisting essentially of SEQ ID Nos: 1-11~~0~~.

Claims 5-8 (Canceled)

9. (Currently amended) A recombinant  $\alpha$ -N-acetyl-D-galactosaminidase as set forth in SEQ ID No:~~1-10~~ 11 and functional analogs thereof.

**Claims 10-12 (Canceled)**